

## **AMENDMENTS TO THE SPECIFICATION**

**Please amend paragraph [0003] beginning at page 1, line 22, as follows:**

[0003] In the tuner 30, the RF automatic gain controller 2 carries out automatic gain control and amplification of the digital broadcast wave *RF* for generating a digital broadcast wave *Srf*. This amplification is carried out based on an RF automatic gain control signal (hereinafter, RF AGC signal) *SAGr* supplied by the RF gain control point setter 40. The mixer 3 frequency-converts the digital broadcast wave *Srf* for generating the intermediate frequency signal *Sif*. This frequency conversion is carried out based on a reference frequency signal *SB* supplied by the oscillator 4. The IF automatic gain controller 5 carries out automatic gain control and amplification of the intermediate frequency signal (hereinafter, IF signal) *Sif* for generating a ~~an~~ modulated analog signal *SMA*. In short, the tuner 30 generates the modulated analog signal *SMA* by frequency-converting and amplifying the digital broadcast wave *RF* received via an antenna.

**Please amend paragraph [0037] beginning at page 10, line 22, as follows:**

[0037] As is evident from FIG. 18, when the attenuation is 0, the maximum gain is observed for both of the RF and IF automatic gain controllers 2 and 5. Between  $-78\text{dBm}$  and  $-5\text{dBm}$ , the gain is attenuated mainly by the RF automatic gain controller 2, but also slightly by the IF automatic gain controller 5. This is because the ratio of the RF AGC signal to attenuation achieved by the RF automatic gain controller 2 is larger than the ratio ration of IF AGC signal to attenuation achieved by the IF automatic gain controller 5.

**Please amend paragraph [0043] beginning at page 12, line 17, as follows:**

[0043] In these automatic gain controllers, for increasing the capabilities of suppressing intermodulation-distortion interference and adjacent-channel interference when

the level of the digital broadcast wave *RF* is  $-78\text{dBm}$ , the gain of the RF automatic gain controller (corresponding to a low-noise amplifier in the above Gazette No. 2699698 and a first gain control circuit in the above Gazette No. 2778260) is maximized, while while the gain of the IF automatic gain controller is attenuated. Over  $-78\text{dBm}$ , the gain of the IF automatic gain controller is made constant, while the gain of the RF automatic gain controller is attenuated. Consequently, the maximum attenuation is  $65\text{dB}$  for the RF automatic gain controller, and  $17\text{dB}$  for the IF automatic gain controller. Therefore, the amount of change in gain, that is, a dynamic range, of the receiver is  $82\text{dB}$ .

**Please amend paragraph [0072] beginning at page 24, line 16, as follows:**

**[0072]** With reference to FIG. 3, the AGC signal generator *SGa* is described. The AGC signal generator *SGa* includes a subtractor 16, a reference value provider 17, a multiplier 18, a constant provider 19, an integrator 22, a level converter *LC*, an RF/IF gain control signal generator 25*a*, a PWM 42*i*, a PWM 42*r*, an LPF (low-pass filter) 43*i*, and an LPF (low-pass filter) 43*r*. The reference value provider 17 outputs a reference value *R* for controlling the digital broadcast wave *SM4a* outputted from the tuner 30 to have a desired value. The constant provider 19 provides a constant *G* for determining determine the gain of a loop formed by the tuner 30, the level detector *LDa*, and the AGC signal generator *SGa*. The integrator 22 includes an adder 20 and a delay unit 21. The level converter *LC* includes a multiplier 23, an inverse coefficient provider 24, an adder 38, and a compensation coefficient provider 39.